**IT Applications Unit 4  
Tammy**

**Chp 5: Organisations & Information Needs**

**Goals of information systems**

1. What is a strategic plan?  
   Strategic plan is a process for identifying long-term goals within an organisation.
2. Describe the role of a mission statement  
   The mission statement is the basis for establishing a set of common goals that will help accomplish the organisations aims
3. What are the advantages of a strategic plan?  
   Have future plans for development.
4. What is an objective?  
   An objective is small achievable tasks undertaken to accomplish a big task.
5. List some organisational goals as indicated in mission statements
6. Distinguish between the goals of non profit organisations and for profit public organisations  
   Non profit organisations focus on providing services to members or people who may be disadvantage in the community.  
   For profit public organisations provide shareholders with maximum returns in the form of dividends and growth in share prices.
7. What is the difference between a mission statement and organisational goals?
8. How can the goals of an organisation often feasibly be achieved?  
   They can be feasible by purchasing or modifying an information system.

**Improving efficiency**

1. Define efficiency in terms of information systems  
   Efficiency is defined in terms of cost, time and effort.

**Improving effectiveness**

1. Define effectiveness in terms of information systems.  
   Effectiveness is defined in terms of the quality of output, accuracy, presentation and comprehensiveness.

**Improved decision making**

1. List the three factors required for improved decision making  
   -Information  
   -Communication  
   -Time

**Role of hardware and software components of information systems**

1. What is an information system?  
   Information system is a collection of hardware, software, data, people and procedures that work together to procedure quality information.
2. List types of information systems  
   -Transaction processing systems  
   -Office automation systems  
   -Management information systems  
   -Decision support systems

**Software spreadsheets**

1. List three functions of a spreadsheet.  
   -Complex mathematical functions  
   -the ability to format data to meet the graphical needs of the user  
   -the ability to produce different types of graphs and charts.

**Formats and conventions**

1. Why are formats and conventions important in producing a spreadsheet
2. List some formats and conventions of spreadsheets, including charts and graphs  
   -limit the number of items represented in a chart to five or six  
   -include unit of measurement on relevant axis  
   - X and Y axis must be labelled  
   -align decimal points by using a consistent number of decimal places.  
   -money values usually have two decimal places or none
3. List conventions of spreadsheet reports.  
   -use of a space or comma to separate numbers greater than 999  
   -use italics to indicate addition or subtraction  
   -subtotals have a single line above the totals  
   -right-align dates to allow for double figures

**Validation**

Define and give an example of;

1. Range checking  
   Range checking involves checking to ensure that data falls within a certain ‘range’.  
   EG: Secondary school levels are within a range of 7 to 12. This can be validated by a IF statement. EG =IF(yr\_level>=7 and yr\_level<=12 (Year level data is not valid) it will display an error message if an appropriate year level is entered.
2. Existence checking  
   Checking if product codes in a spreadsheet are working or been done correctly.  
   EG: the total sales figure on a spreadsheet might not display its calculation until all sale figures are entered.
3. Data type checking  
   Checking data to make sure it is the correct data used.  
   EG: check to make sure that the number of balls sold are integers and not decimal numbers.
4. Restricted data entry  
   It is making sure that the data that has been entered is valid.  
   EG: drop down menu may appear with several choices. This minimises the users ability to enter wrong data into that field on the spreadsheet.

**Testing a spreadsheet solution 157**

1. What is the difference between validation and testing?  
   Validation is involved with input. Testing is involved with output and can also involve ensuring that electronic validation works correctly.
2. List some common functionality problems with spreadsheets  
   -when copying and pasting formulas, the formula continues to reference the original cells, not the new cells.  
   -SUM formula does not include extra rows that you inserted after the formula was created.

**Functionality testing**

1. What areas of the spreadsheet are being tested?  
   All formulas and functions

**Presentation testing**

1. List the formats and conventions to be tested  
   -appropriate use of white space and fonts  
   -a balance in terms of text and graphics on each page  
   -whether the intended audience is easily identifiable from the title of the spreadsheet  
   -use of consistent fonts and sizes  
   -whether the text is easy to read  
   -consistent use of colour scheme  
   -consistent colour used for all links  
   -charts need to be easily read and labels are large enough to read

**Accessibility testing**

1. What is the difference between usability testing and accessibility testing?  
   Difference is that usability testing is how easily the user can work and use the spreadsheet. Accessibility testing is how easy it is for the user to use, read and is the correct sheets on the page.

**Types of information problems**

1. List the common reasons as to why information problems occur  
   -inefficient procedures  
   -information produced has errors or does not meet the users needs  
   -problems due to dependence on old technology